

I claim:

1.

A data path selection device comprising at least two data terminals for a line-bound data transmission system, wherein any desired data path connections are set between the data terminals of the data path selection device.

2.

The data path selection device according to claim 1, wherein the data path connections are defined via at least one data connection by at least one setting signal.

3.

The data path selection device according to claim 1 wherein at least two data terminals are electrically isolated from one another.

4.

The data path selection device according to claim 2, wherein the data connections have a real-time capability.

5.

The data path selection device according to claim 4, wherein the data connections are real-time-capable Ethernet connections.

6.

A method for producing flexible data connections between communication units combined into groups, wherein a group comprises at least one communication unit having at least one line-bound information exchange between two groups or at least one group and a control computer, said method comprising using data connections with a real-time capability between the communication units and/or the communication groups, using at least one data path selection device to produce the data connection between the groups, and setting desired data path connections of the data path selection device.

7. The method according to claim 6, wherein data paths of the data path selection device are set automatically by means of at least one sequence step.
8. The method according to claim 6 utilized in a machine tool, production machine or robot.
9. The method according to claim 8, wherein the production machine is a printing machine.

*Claim 9*